



Mineral Facilities Map Project

Latin America and Canada

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Outline

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Background

- Global Mineral Analysis Section:
 - Country specialists collect, analyze and publish information on mineral facilities for more than 180 countries based on production data, trade data and other information.
 - Annually a Mineral Questionnaire was requested to obtain information about the quantity and value of mineral production by country.
- The collected information is used to create and publish the USGS Minerals Yearbook:
 - *Table 1: Production of Mineral Commodities*
 - *Table 2: Structure of Mineral Industries*
- The sources of information to create the tables are:
 - Mineral Questionnaires
 - Government statistical publications
 - Companies annual reports
 - Press release and trade journals

Projects

- Mineral Questionnaire
 - Update the Global Mineral Analysis contacts
 - Government agencies counterparts
 - Embassy contacts
 - Prepare over 200 packages that contains the Mineral questionnaire and other information that were shipped to the countries.

UNITED STATES GEOLOGICAL SURVEY NATIONAL MINERALS INFORMATION CENTER					
Minerals Questionnaire					
Quantity and Value of Minerals Produced in					
ALBANIA					
Calendar Year 2008 and 2009					
Commodity	Unit of weight or measure ¹	QUANTITY		For ores and concentrates, state average metal content	2009 Value of Production (in local currency*)
		2008 FINAL	2009 (mark e/ for estimates)		
Metals					
Bauxite					
Chromium:					
Chromite, gross weight					
Marketable ore(41.6% Cr ₂ O ₃)					
Concentrate					
Total marketable ore and concentrate					
Ferrochromium					
Copper:					
Ore:					
Gross weight					
Concentrate					
Cu content					
Metal, primary:					
Smelter (blister)					
Refined, electrolytically					
Iron and steel :					
Pig iron					
Crude steel					
Rolled steel					
*Exchange rate:					
= U.S.\$					
¹ Metric tons unless otherwise specified					

Projects

- Global Mineral Facilities Directory
 - Created a directory which includes the locations of Mineral Facilities for *Latin America and Canada*
 - The primary sources of information were:
 - *Table 2: Structure of the Mineral Industries*
 - Country specialists guidance
 - Mining companies official websites
 - Satellite images and Online gazetteers

- The Global Mineral Facilities Directory includes:
 - Commodity categories: Metals, Industrial Minerals and Fuel Minerals
 - Location
 - Geographic coordinates
 - Facility name
 - Facility type: Mines, Oil and Gas Fields, or Plants
 - Mining method: open pit /underground
 - Company information: Operators and Investors
 - Facility status: active /close
 - Annual capacity
- Directory will be incorporated into Structure of Mineral Industry Database .

Mineral Facilities located using Google Earth 2010 TM



Google Earth 2010

Plant at Muriel Province

- Country: Cuba
- Commodity: Cement
- Location: Barrio Mujica, Mariel Province
- Facility Type: Plant
- Operating Company: Cementos Curazao N.V.
- Annual Capacity: 1,100 metric tons per year



Google Earth 2010

Petrotin Refinery

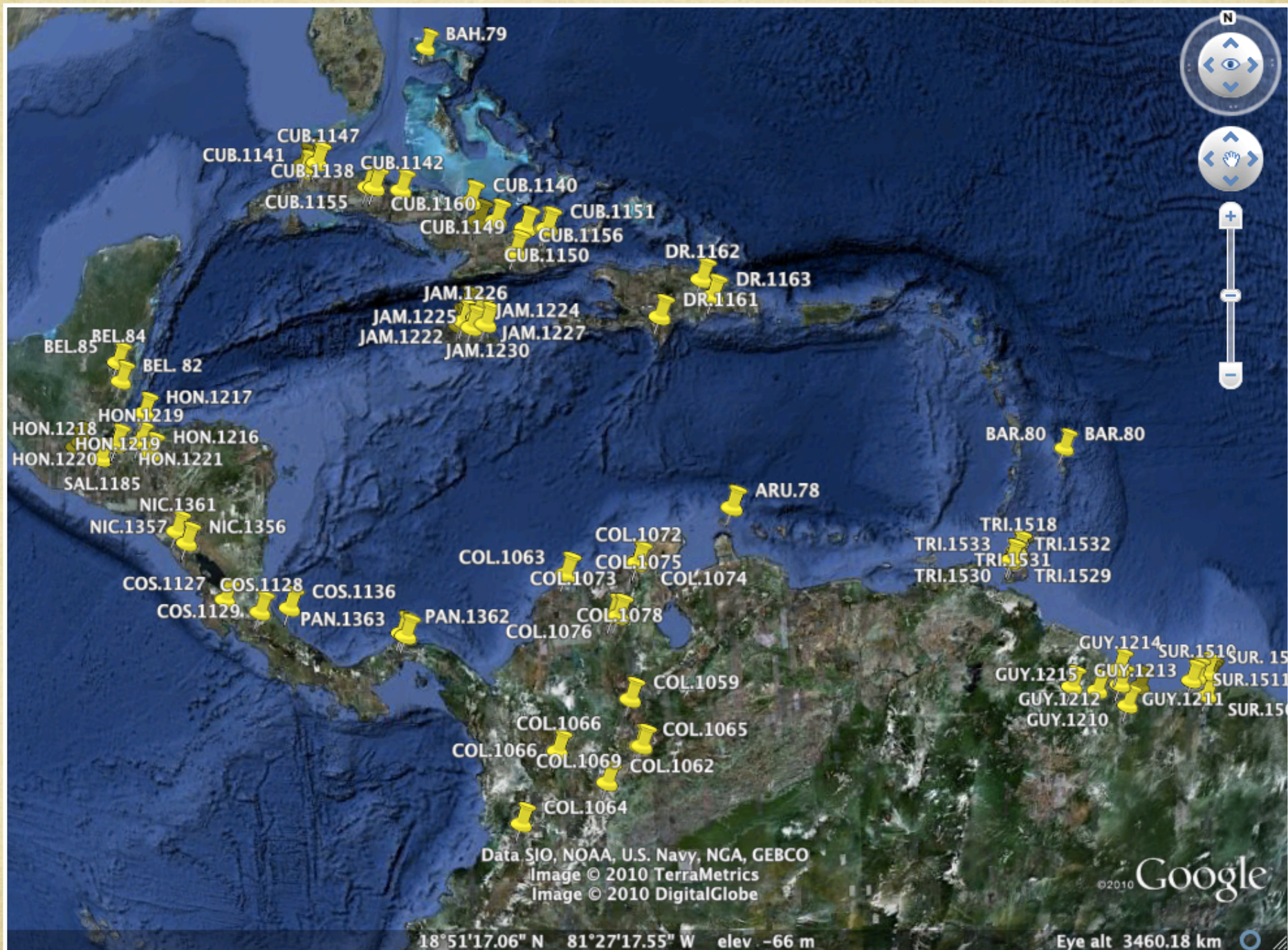
- Country: Trinidad and Tobago
- Commodity: Petroleum Refinery
- Location: Pointe-a-Pierre
- Facility Type: Plant
- Operating Company: Petroleum Company of Trinidad and Tobago Ltd.
- Main Investor: Government, 100%
- Annual Capacity: 175,000 42-gallon barrels per day

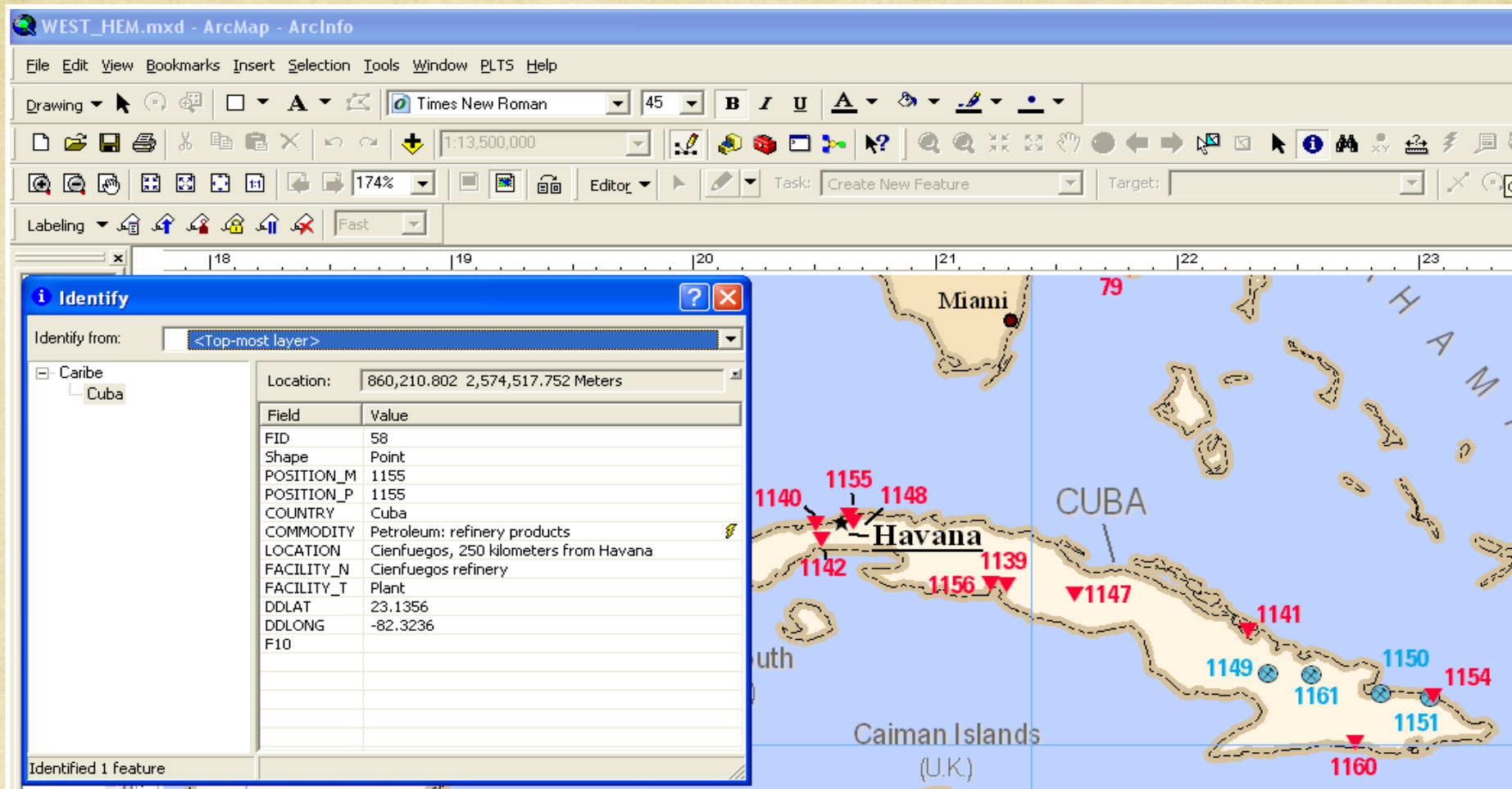
Bajo de la Alumbra Mine

- Country: Argentina
- Commodity: Gold and Copper
- Location: Catamarca Province
- Facility Type: Open pit Mine
- Operating Company: Minera Alumbra Ltd.
- Main Investor: Xstrata Plc, 50%
- Annual Capacity: ~ 160 thousand of metric tons per year



Google Earth 2010





The directory was imported to ArcGIS software to create Mineral Facilities Map.



Google Earth 2010

Mineral Facilities Map Project

- This map displays mineral facilities of Central America, Caribbean and Argentina.
- Each location represent one commodity and one facility type at single location.





Mine—Includes mines, quarries, salt pans, and other extractive facilities

Oil and gas fields—Point located in center of field or approximate vicinity

Plant—Includes processing and refining facilities such as refineries, smelters, and mills.



Conclusion

- The Mineral Facilities of Latin America and Canada complete a world-wide project that shows the mining and production of mineral commodities globally.
- The Global Mineral Facilities Directory and Mineral Facilities Maps provides:
 - Information to assist in the analysis of availability and trade of mineral commodities for the U.S. economy.
 - Estimation of future production for different commodities from individual countries, regions and the world's global market.
 - The distribution of resources and potential new reserves.

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Questions?

